

Radio

FEDERAL INSPECTORS WATCH AMATEUR STATIONS

None But Licensed Operator May Transmit Radio Messages

By R. L. DUNCAN,
Director, Radio Institute of America

When you visit a friend who has a transmitting set, don't start tinkering with it.

You may make yourself liable to a heavy fine and be the cause of having the set confiscated. For none but a licensed operator may transmit radio messages.

The government regulations are strict on this score. There is no charge by the department of commerce for the license. But a fine up to \$500 may be imposed for a violation.

THREE CLASSES

The licenses granted are for:

1. General amateur stations, permitted to use a power input of one kilowatt and operate on a wave length up to 200 meters.

2.—Restricted amateur stations, located within five miles of a naval or military radio station, limited to a power input of 1.2 kilowatt and a wave length of 200 meters.

3. Special amateur stations, permitted to transmit on wave lengths up to 375 meters. The applicant for this license must have had at least two years' experience and must prove that his operation will be of direct benefit to the science of radio.

Besides these general classes, there are several special licenses issued to universities and experimental stations. All stations are required to use as little power as possible to carry on their successful communications.

Malicious and willful interference, or the sending out of false or fraudulent distress signals are prohibited.

Applications for operators and station licenses of all classes should be made to the radio inspector of the district in which the station is located. There are nine of these districts with their headquarters in the following cities:

First district—Boston.

Second district—New York.

Third district—Baltimore.

Fourth district—Norfolk, Va.

Fifth district—New Orleans.

Sixth district—San Francisco.

Seventh district—Seattle-Wash.

Eighth district—Detroit.

Ninth district—Chicago.

SPECIAL PERMITS

Those amateurs who live in places too far from the district office to make personal application can get temporary permits if they satisfy the authorities by letter that they are familiar with all the requirements.

Even after an applicant has passed his examination for an amateur license, he cannot operate his station until he gets a station license from the inspector. This is obtained by filling out an official blank with a complete description of the apparatus. It conforms to the government requirements, the license and station call is issued and the amateur may start transmitting.

But he must remember at all times that he cannot commercialize his station.

MAN OF ALIASES

Answer to the query made by Sheriff Pincock of California authorities is said to have been the effect that Watson was known there and had assumed many aliases.

Since the driver and Watson left Ogden, nothing has been heard from them, further than the check and the note. Inquiries sent to various towns in Utah have failed to bring any news of the couple, it is said.

Fear that Kristofferson may be under the influence of the stranger grew today when the car could not be traced. The driver is 22 years of age and resides at 1031 Hudson avenue, according to the officers.

A message recently received from Tremonton officers to be on the lookout for a man recently tried and sentenced to prison for a check swindle, was led Sheriff Pincock to believe that "Watson" and this man are the same. The Tremonton dispatches described him as between 35 and 40 years of age, stout and wearing leather leggings. This is said to compare well with the description of the man who hired Kristofferson to drive him to Peterson.

HIRE AUTOMOBILE

The Tremonton officers said that the man came there recently and hired an automobile, running up a bill of \$12. He then sent negotiations for the purchase of a new car for himself and gave a check for \$12. The dealer, however, would not deliver the car until the validity of the check was determined, it is said. When the man found that efforts were being made to investigate the check, he disappeared from the town. Since that time the check is said to have been found worthless.

Messages are being sent broadcast throughout Utah and western states in an effort to locate the two men and the car.

0005 microfarads shunted across the secondary.

No. 3—Crystal detector, galena preferably.

No. 4—Small fixed condenser.

No. 5—Head phones of high resistance.

No. 6—Double-pole, double-throw switch for changing from the crystal to the vacuum detector or vice-versa.

No. 7—Grid leak and grid condenser.

No. 8—Detector tube.

No. 9—Pilot lamp rheostat.

No. 10—Six-volt "A" battery.

No. 11—A 22.12-volt "B" battery.

SWITCH CHANGES RECEIVING METHODS

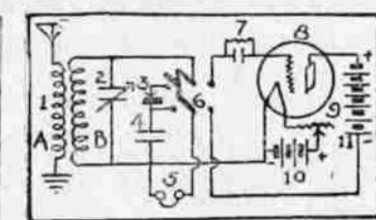
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If you have passed from the crystal detector stage to that of the vacuum tube, do not throw your old set into the discard. It may be used with the larger set in one circuit.

By use of a "double-pole, double-throw switch," you will be able to shift from one set to the other—using the old crystal detector for nearby broadcasting and the vacuum tube for more distant reception.

Hook up according to the diagram:

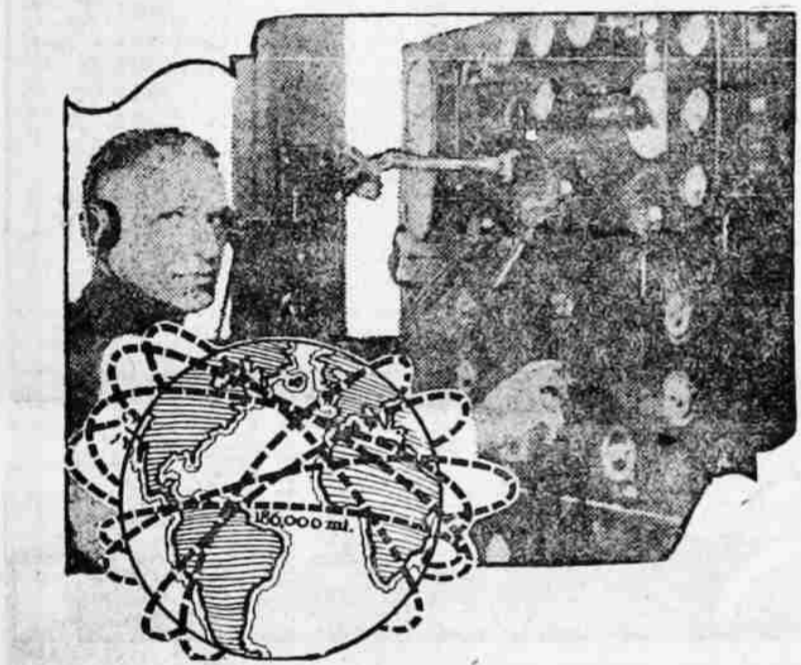
No. 1—Loose coupler or variocoupler.



ler with "A" representing the primary and "B" the secondary.

No. 2—Variable condenser of about

AROUND WORLD IN FLASH IS DONE BY WIRELESS



Around the world in a fraction of a second! That's the amazing possibilities offered by radio—the flashing of a message to the farthest end of the globe almost instantaneously.

Radio waves travel as fast as light waves, say scientists. That's 186,000 miles a second. Which means that a radio message sent from a point in the United States would encircle the globe nearly seven and one-half times in one second.

That is impossible by telegraph because there is no direct line around the earth. It takes hours to reach a point where several cables are used in transmission.

It takes only about one-fiftieth of a second for a message to be flashed from the powerful government station at the Presidio in San Francisco to the opposite side of the globe. This radio station has the equipment to do it, too. There are only a few others like it in the world.

France is building a radio station that it is believed will be able to encircle the earth with its messages. Another similar station is in the process of building on Long Island, New York. Not satisfied with the earth, scientists are said to be experimenting on apparatus that they hope may flash signals to the moon and Mars.

RADIO PRIMER

FLUORESCENT—A thin wire of tungsten or other adopted substance for illumination by electricity in a vacuum tube. In the radio vacuum tube, the filament is used to emit millions of electrons, when lighted. This makes part of the action of a vacuum tube detector or amplifier.

"MR. PIM PASSES BY"

AT ORPHEUM TONIGHT

At the Orpheum tonight, "Mr. Pim Passes By," the sparkling comedy by A. A. Milne, will be presented by A. L. Ellinger. Featured in the cast are Laura Hope Crews and other members of the original New York company are Dudley Digges, Erskine Sanford, Leonard Mudie, Alison Bradshaw, Augusta Hayland, Madeleine Barr. The New York critics and the public acclaimed "Mr. Pim Passes By" as the most entertaining comedy of the season. Originally played under the auspices of the Theatre Guild, this smart comedy enjoyed a run of over two hundred nights at the Garrick in New York, after its first run in London. Advertisement.

FILIPINOS REMIND AMERICA OF PROMISE

SEATTLE, Wash., May 24.—Members of the Philippine parliamentary mission, comprised of 36 distinguished statesmen of the islands, en route from Manila to Washington, D. C., are in Seattle today following their arrival Monday night on the liner Keystone State, completing the first lap of their journey to the national capital to remind the United States of its promise made six years ago to grant Philippine independence.

"The yoke of domination no matter how lightly placed, is falling to a liberty loving people," said Jorge B. Vargas, director of public lands and secretary of the mission in a statement concerning the purpose of the expedition.

"The mission comes to the United States with a friendly mission to remind the United States that they promised six years ago to recognize our independence as soon as stable government was provided."

The delegation will spend a few days here and will then go to San Francisco to await the arrival of Manuel Quezon, president of the Philippine senate, and Sergio Osmeña, speaker of the house of representatives.

DRY LAWS' EFFECTS ON CANDY EXPLAINED

CHICAGO, May 24.—Prohibition's effect upon the candy industry was explained at Tuesday's session of the Associated Retail Confectioners, one of the four branches of the industry holding simultaneous gatherings here, by Vincent L. Price of St. Louis.

"There are three kinds of drinking men," he said. "The one who drank because he had to have it, the other drank to quench his thirst and the third who inhaled for sociability. The two latter classes are the ones who have been the greatest benefit to the candy business."

This is especially true in the smaller towns, where the candy store is a sort of social center. The whole family partakes of drinks, and more candy is sold.

The savings bank was the greatest gain by the closing of the saloons, the soft drinks next, ice cream, third, movies and theatres fourth and our industry fifth."

Mr. Price told the retailers that the consumption of confectionery last year was 14 pounds per capita, compared with 19 pounds in the pre-war period.

SHEEPMEN AT WAR WITH SPORTSMEN

POCATELLO, Idaho, May 24.—Following the arrest of Thomas Mendib, sheepherder for the Miller Sheep company of Mountain Home, for carrying a gun in the fields without a license, the Idaho Sheep association has charged that the state department is unfair. The association is starting a movement to do away with the law requiring foreigners to secure a license to carry arms.

DRIVER OF OGDEN TAXI IS MISSING

So Is Passenger Who Sends Worthless Check for \$110 Here

Mystery surrounding the disappearance from Ogden more than a week ago of E. S. Kristofferson, taxi cab driver for the Ogden Taxicab and Transfer company, with one of the company's machines, was deepened today when messages sent out by Sheriff Richard Pincock brought no results.

The driver was hired for a purported trip to Peterson, Tuesday, May 16, by a man giving his name as D. N. Watson, who said he wanted to drive to that town to purchase cattle. A few days ago a check arrived in an envelope, addressed to the taxicab company, for the amount of \$110, drawn on a California bank.

The check, which was signed "D. N. Watson," was turned over to Sheriff Pincock, who immediately wired a California town and soon determined that the check was worthless. A note from the taxi driver, which accompanied the check, stated that they "were getting along o. k."

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WILSON SUPPORTS CANDIDACY OF POUL

RALEIGH, N. C., May 24.—Receipt of a letter from former President Wilson stating in his judgment the retirement from Congress of Representative E. W. Poul, of the fourth North Carolina district, would be a "serious loss to the party and to the country," was announced today by H. S. Jernan, Raleigh banker. The letter from the former president was in response to one requesting his estimation of the North Carolina congressman who faces opposition in his district for re-nomination.

"I am glad to have an opportunity," Mr. Wilson wrote, "to express my confidence in Mr. Edward W. Poul. He has certainly been a most conscientious and useful member of the house and throughout his administration rendered me and the causes I believe in the most constant and generous service. In my judgment his retirement would be a serious loss to the party and to the country."

CANCER RESEARCH FOUNDATION VOTED

ST. LOUIS, May 24.—Establishment of a national cancer research foundation has been voted by the American Radium society, and the Radiological society of North America, which met here in connection with the convention of the American Medical association.

Dr. Edwin C. Ernst, of St. Louis, secretary of the American Radium society, announcing the project to establish the fund for cancer research, explained that eventually it was expected all the large universities would participate in the enterprise.

Mrs. Caroline Boles

YOUR KIDNEYS

Your Good Health and Long Life Depend on Your Kidneys. That's Why Insurance Companies Always Insist on Urinalysis.

Beaverton, Oregon—"I take great pleasure in stating that Dr. Pierce's Anuric Tablets have done for me in a very severe case of bladder and kidney trouble. For ten years I was distressed about every thirty minutes. I doctored and doctored but no relief. My last doctor bill was \$175, and I was no better. I went back to my old home and my folks wanted me to give Dr. Pierce's Anuric Tablets a trial so I did and I also took the 'Golden Medical Discovery' with them to work on my liver. Now I can walk, ride, go to town and go for five or six hours without being distressed. I can not praise the Anuric Tablets too much for they are wonderful for the kidneys."—Mrs. Caroline Boles, Box 323.

Write Dr. Pierce's Invalids' Hotel in Buffalo, N. Y., for free advice. Send 10c for trial package Anuric. Advertisement.

PARIS HAS HOTTEST MAY DAY IN CENTURY

PARIS, May 24.—(By the Associated Press.)—Paris today experienced the hottest May day in 116 years, the thermometer hitting 94 1-10 degrees Fahrenheit in the shade at 2:45 o'clock this afternoon.

One of many European capitals to experience a similar heat wave that began sweeping western Europe, five days ago.

The heat here generated a peculiarly stifling haze, although the sky was blue throughout France. The weather bureau predicts continued heat with possibly an even higher temperature tomorrow.

The usually crowded streets were thinly peopled at noon today and there were noticeably few women on the boulevards. The cafes and beer gardens, however, did a land office business.

GENEVA, May 24.—The heat wave in the Alps region has broken a 30-year record for the month of May, the thermometer at a number of points today registering 90 degrees Fahrenheit. Snow and glaciers are melting rapidly and the Rhine and Rhone rivers are rising.

An avalanche released by the heat destroyed an Alpine club house on the summit of Mount Gerginkopf, 5000 feet above sea level.

GIRL AND BROTHER OF PRISONER FREED

LOS ANGELES, May 24.—Charges of conspiracy to assist Herbert R. Wilson, former convict and alleged mail robber and murderer, to escape from jail, resting against his brother, Frank Wilson, and his reputed sweetheart, Helen Gillespie, were dismissed in the United States district court here Tuesday.

Frank Wilson had been unable to obtain a bond of \$25,000 and had been in the county jail since early in April. Miss Gillespie had been free under bond of \$5000.

Their arrest followed an alleged attempt by Herbert Wilson, his alleged accomplice, Herbert Cox, and Eddie O'Brien, another alleged mail robber, to escape from the Los Angeles county jail.

Cox was killed when deputy sheriffs frustrated the escape. In his last words he accused Wilson.

The death of Cox and the dismissal of the charges against Frank Wilson and Miss Gillespie left Herbert Wilson to face trial on several charges alone. He and Cox were alleged to have obtained more than \$1,000,000 in a mail robbery here more than a year ago.



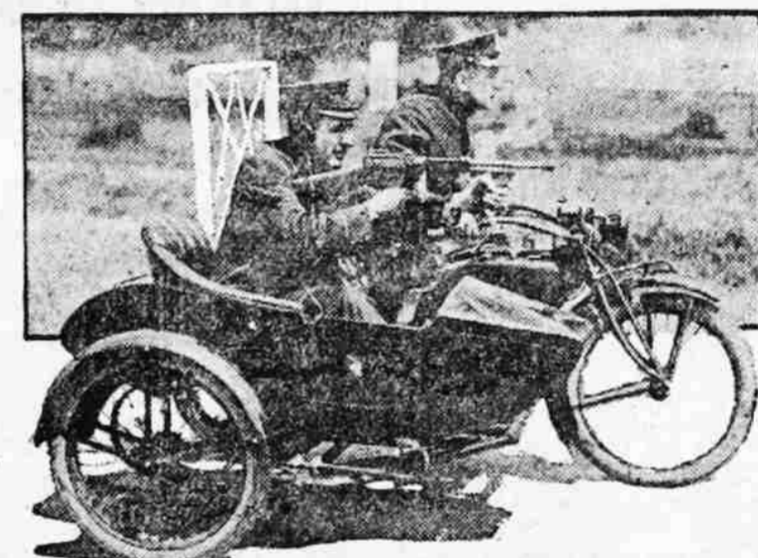
--a step ahead in value
-men's oxfords

\$8

—here is a value that even the busiest business man can afford to take time for investigation. —sound quality, expert fitting service and low first and last cost—well, you can't beat this combination.



Radio Speeds Up Police Chase



The latest word in equipment for the police chase is a radio outfit. The Thompson sub-machine gun, firing 1000 shots a minute, does the work in stopping escaping law violators. But radiophone keeps the police in constant touch with headquarters for tips and orders to speed up the chase.

Success has attended experiments in Madagascar in the use of spider web as a silk substitute.

How to Make Grape Jelly From Bottled Grape Juice

Inexpensive and Takes Only Ten Minutes

By Ann Proctor.

You can make the finest grape jelly you ever tasted, in ten minutes, from bottled grape juice at a cost of only 7 or 8 cents for a six-ounce glass. This jelly is much better flavored than that made by old methods requiring unripe grapes, because grape juice is pressed from ripe full-flavored grapes. This is the way to make it: Measure out 4 cups (1 qt. bottle) of grape juice and 7 1/2 level cups (3 1/4 lbs.) of sugar into large sauce pan, stir and bring to boil. Add at once 1 bottle (scant cup) of CERTO, stirring, constantly and bring to hard boil for one minute. Remove from fire, skim and pour into glasses at once.

This makes 15 six-ounce glasses of the very finest grape jelly for only 7 or 8 cents a glass and it is so easy even a child can do it. CERTO is pure concentrated fruit pectin (Mother Nature's Jelly Maker) the use of which is so highly endorsed by government authorities and cooking experts and is obtainable from most any grocer or druggist. Accompanying each bottle of CERTO is a book giving nearly a hundred recipes for making all kinds of jams, jellies and marmalades by the famous CERTO process which takes only 1 minute's boiling and never fails. For extra free copies of the CERTO Book of Recipes write Pectin Sales Company, Inc., Dept. 182 Rochester, N. Y.

Important: Be sure to make your Strawberry, Raspberry, Blackberry and Cherry Jam and Currant Jelly this year with CERTO. Costs less, looks and tastes better, and never fails. If your grocer or druggist does not have CERTO, please telephone 370 to learn where to obtain it.—Advertisement.

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MUNSHING WEAR

These are busy days in the underwear section. Shoppers realize they have to buy good goods once they have tried them. And again—there is satisfaction here in finding what you want—at the price you want to pay. We have a few of the items.

Munshing Union Suits in All Styles

Women's Munshing Union Suits in all styles. Bodice tops, loose knee. Pink and white. Sizes 24 to 32. Priced at \$1.00.

Dainty Union Suits With Loose Knees

Women's closed envelope suits. Shirl finish, loose hand top. All look smart to fit and will retain fit. Priced at \$1.00.

Women's Suits Long Sleeves

Women's summer suits made high neck, long sleeve length, fine combination. Bleached only. All sizes. \$1.50 and \$2.00.

A Union Suit Looks Like Silk

Women's fine mercerized suit. Looks like silk, better than silk. Bodice top, knee. Both pink and white. All sizes.

Vests and Pants the Munshing

Women's separate vest and pants. Made of the same yarns in all styles. Munshing stamped "Munshing" and white. All sizes.

Munshing Suits the Kiddies

Children's Munshing union made of good quality material, taped from shoulder. Buttons. Loose and bloomer knee. All sizes.

Kiddies' Union That Are Ready Taped

Children's taped union made of fine combination. Taped from shoulder. Buttons combined in one. 1 to 12 years.

Light, Airy Union Suits for the Kiddies

Children's union suits with er wing sleeve, high neck, sleeve low neck. Cream. All sizes. Priced at \$1.00 and \$1.25.

Kiddies' Pants Waists Stamp Munshing